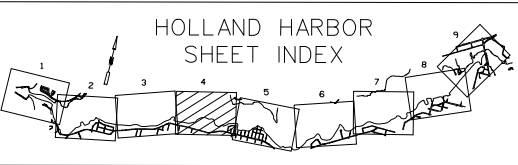


GRID SCALE FACTOR: 0.9999886
GRID DIST. DIVIDED BY GRID
SCALE FACTOR = GROUND DIST.

LAKE MACATAWA



SURVEYED ON: 10 OCTOBER 2003
POSITIONING METHOD: DGPS, USING C. G. BEACON CORRECTIONS
VESSEL: LAUNCH 3033

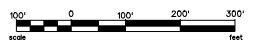
21 FT. PROJECT DEPTH
CHANNEL LIMITS SHOWN THUS: _____
21 FT. CONTOUR SHOWN THUS: _____

ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. 1985 FOR
LAKE MICHIGAN ELEVATION 577.5 FT. ABOVE MEAN
SEA LEVEL AT RIMOUSKI, QUEBEC. HYDRAULIC CORRECTOR
OF 0.3 FT. APPLIED.

GRID SYSTEM BASED ON LAMBERT PROJECTION, MICHIGAN
STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (2113)
1983 NORTH AMERICAN DATUM, U.S. SURVEY FOOT.

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS
THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED
AND CAN ONLY BE CONSIDERED AS INDICATING THE
GENERAL CONDITIONS EXISTING AT THAT TIME.

NO.		DATE		REVISION		BY	
U.S. ARMY ENGINEER DISTRICT, DETROIT CORPS OF ENGINEERS DETROIT, MICHIGAN							
DRAWN BY		HOLLAND HARBOR, MICHIGAN					
DESIGNED BY		CONDITION OF CHANNEL					
CHECKED BY		OCTOBER 2003					
REVIEWED BY		GRAND HAVEN AREA OFFICE					
SUBMITTED		APPROVAL, RECOMMENDED					
CHIEF, PROJ. OPNS. SECTION		CHIEF, OTH. BRANCH		DATE			
APPROVED		P.E.		SCALE 1" = 100'			
CHIEF, CONST. OPNS. DIVISION		SHEET 4 OF 9		CADD FILENAME: H0044053.DGN DRAWING NUMBER			



DATE OF PHOTOGRAPHY
19 JULY 1992

CENTER LINE T.P.			
T.P.	EAST	NORTH	
CL-4	12,638,104.68	471,507.57	

CHANNEL LINE T.P.			
T.P.	EAST	NORTH	
W	12,638,101.92	471,578.57	
NW	12,637,715.12	471,261.39	
RR	12,638,557.18	471,371.32	